



City of Bordentown Water Department 2022 Annual Drinking Water Quality Report 2021 Data

(PWSID# 0303001)

City of Bordentown Water Department
324 Farnsworth Avenue
Bordentown, NJ 08505

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Mission Statement

We at the City of Bordentown Water Department work hard each day to provide high-quality water to every tap. We ask that all our customers help us protect and conserve our water resources, which are the heart of our community, our way of life, and our children's future.

Local water quality - call the City of Bordentown Water Dept at 609-298-2121, X5 or 115

State of NJ Dept of Environmental Protection, Bureau of Safe Drinking Water: www.state.nj.us/dep/watersupply, (609) 292-5550

Water quality - call the U.S. Environmental Protection Agency's Safe Drinking Water Hotline, 1-800-426-4791

For more information...

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled public meetings. They are held at 7:00 p.m. on the second Monday of each month at the Carlslake Community Center, 207 Crosswicks Street. If you have questions regarding the source water assessment report or summary, please contact the NJDEP's Bureau of Safe Drinking Water at (609) 292-5550.

If you have any questions about this Consumer Confidence Report or concerning your water utility, please contact the City of Bordentown at 609-298-2121, ext. 5 or 115.

What if I have questions?

Landlords must distribute this information to every tenant as soon as practicable, but no later than three business days after receipt. Delivery must be done by hand, mail, or email, and by posting the information in a prominent location at the entrance of each rental premises, pursuant to section 3 of P.L. 2021, c. 82 (C.58:12A-12.4 et seq.).

This report is designed to inform you about the quality of the water and the services that the City of Bordentown Water Department (BWD) delivers to you every day. Our constant goal is to provide you with a dependable supply of high-quality drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Where does my water come from?

The raw water we treat comes from four groundwater wells supplied from the Magothy-Raritan aquifer. The city does not use any other sources of supply. For 2021 we produced approximately 1.45 million gallons of high-quality drinking water for our customers on a daily basis.

How is my water treated?

The BWD water treatment plant uses a treatment process consisting of WRT radiological filtration, a packed tower aerator and disinfection, with pH adjustment and corrosion control treatment. In November 2015 a radium removal treatment process was added to assist in the removal of radioactive contaminants.

Where does my water come from?

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. The Bordentown Water Department routinely monitors for constituents in your drinking water, according to Federal and State laws. The table on the other side of this report shows the results of our monitoring for January 1st to December 31st, 2021. Drinking water, incl. bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily mean your water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Waived Requirements

The Safe Drinking Water Act regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system has been granted a waiver for asbestos.

How do drinking water sources become polluted?

(NJDEP-required descriptive language)

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases radioactive materials, and can pick up substances resulting from human or animal activity. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metal which may be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil or gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants**, which may be naturally-occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants**, including synthetic or volatile organic chemicals, which are by products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Lead Statement

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. BWD is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing the tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>. BWD, working together with our resident advisory committee, has returned to State compliance in 2021 for both compliance periods. For additional educational information and updates, visit the City's website at <https://cityofbordentown.com/lead-testing-information/>.

Violations

BWD received a violation in 2021 for failing to submit a the lead consumer notice to the State within the given timeframe for the compliance period 06/01/20 to 12/31/20. Resident notifications were completed in the appropriate timeframe and the required notice was provided to the State. The quality of your drinking water during this compliance period is known

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Others

Children may receive a slightly higher amount of a contaminant present in the water than do adults, on a body weight basis, because they may drink a greater amount of water per pound of body weight than do adults. For this reason, reproductive or developmental effects are used for calculating a drinking water standard if these effects occur at lower levels than other health effects of concern. If there is insufficient toxicity information for a chemical (for example, lack of data on reproductive or developmental effects), an extra uncertainty factor may be incorporated into the calculation of the drinking water standard, thus making the standard more stringent, to account for additional uncertainties regarding these effects. In the cases of lead and nitrate, effects on infants and children are the health endpoints upon which the standards are based.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

City of Bordentown Water Department's 2021 Drinking Water Quality Results

Contaminant (Unit of measurement)	MCLG	MCL	Your Water	Range or Sample Date	Violation (Y/N)	Likely Source of Contamination	Potential Health Effects
Disinfectants & Disinfectant Byproducts (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)							
Total Trihalomethanes (ppb)	n/a	80	14.37 Highest LRAA	ND – 14.37	No	By-product of drinking water disinfection.	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
Haloacetic Acids (ppb)	n/a	60	5.78 Highest LRAA	0.30 – 5.78	No	By-product of drinking water disinfection.	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Radioactive Contaminants							
Combined Radium (pCi/L)	0	5	1.5	1.5 – 1.5	No	Erosion of natural deposits.	Some people who drink water containing Radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
Inorganic Contaminants							
Barium (ppm)	2	2	0.001	10/14/20 (a)	No	Discharge of drilling wastes; erosion of natural deposits.	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Beryllium (ppb)	4	4	0.4	10/14/20 (a)	No	Discharge from metal refineries and coal-burning factories or electrical, aerospace, and defense industries	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
Copper (ppm) (b)	AL = 1.3	AL = 1.3	0.04 (c) 0.24 (d) (90th percentile)	0 of 126 sites exceeded the AL (c,d)	No	Corrosion of household plumbing systems; erosion of natural deposits. Leaching from wood preservatives.	Short-term exposure: Gastrointestinal distress. Long-term exposure: Liver or kidney damage. People with Wilson's Disease should consult their personal doctor if the amount of copper in their water exceeds the action level
Lead (ppb) (b)	0	AL = 15	3.34 (c) 3.4 (d) (90th percentile)	3 of 64 (c) sites exceeded the AL 2 of 63 (d) sites exceeded the AL	No	Corrosion of household plumbing systems, erosion of natural deposits.	Infants and children: Delays in physical or mental development; children could show slight deficits in attention span and learning abilities; Adults: Kidney problems; high blood pressure
Nitrate (as Nitrogen) (ppm)	10	10	2.38	2.38 – 2.38	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
Nickel (ppb)	N/A	None	22.5	10/14/20 (b)	No	Erosion of natural deposits.	Nickel occurs naturally in the environment at low levels. Nickel is an essential element in some animal species, and it has been suggested it may be essential for human nutrition.
Thallium (ppb)	0.5	2	0.4	10/14/20 (a)	No	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories	Hair loss; changes in blood; kidney, intestine, or liver problems.
Chlorine Residual							
Chlorine (ppm)	MRDLG = 4.0	MRDL = 4.0	0.45 (avg)	0.0 - 0.99	No	Water additive used to control microbes.	Some people who drink water containing chlorine well in excess of the MRDL could experience irritating effects in their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Microbiological Contaminants (A violation occurs when a routine sample and a repeat sample in any given month are total coliform positive, and one is also fecal coliform or E. coli positive.)							
Total Coliforms (# of positive monthly samples)	0	5% of monthly samples	0 out of 180 samples	Minimum 15 samples per month	No	Naturally present in the environment.	Coliforms are bacteria that are naturally present in the environment. They are used as an indicator that other, potentially harmful bacteria may be present. If the MCL is exceeded, the water supplier must provide public notice. No e Coli present on coliform positive samples.
Volatile Organic Chemicals (VOC's)							
None							

Individual Contaminants							
Ethylene Dibromide (ppb)	0	0.05	0.01	0.01 – 0.01	No	Discharge from petroleum refineries	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
Secondary Contaminants							
Manganese (ppb)	RUL	50	30	25.2 - 30	No	Erosion of natural deposits	Note on Recommended Upper Limit (RUL) Exceedances: Secondary standards are non-mandatory guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health.
Chloride (ppm)	RUL	250	8	10/14/20 (a)	No	Erosion of natural deposits	
Foaming Agents (ppm)	RUL	0.5	0.06	10/19/20 (a)	No	Surfactants from detergents and cleansers	
pH	RUL	6.5-8.5 Units	10.1	6.46 – 10.1	No	Natural property of water	
Sulfate (ppm)	RUL	250	6.20	6.1 - 6.2	No	Erosion of natural deposits	
Total Dissolved Solids (ppm)	RUL	500	20.00	10/14/20 (a)	No	Minerals and salts dissolved in the water	
Zinc (ppm)	RUL	5	0.22	10/14/20 (a)	No	Erosion of natural deposits	
Zinc (ppm)	RUL	5	0.22	10/14/20 (a)	No	Erosion of natural deposits	
Footnotes:	(a) The State allows monitoring for some contaminants every three years since the concentrations do not change frequently. The latest sample dates are shown for these contaminants. (b) Copper, lead, and nickel MCL's have not yet been established for community water systems. Currently, only Action Levels (AL) of 1.3 ppm for copper and 15 ppb for lead apply. (c) Monitoring period from 1/1/21 to 6/30/21. (d) Monitoring period from 7/1/21 to 12/31/21.						

Definitions			
ppm	Parts Per Million: equivalent of one second in 12 days	AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
ppb	Parts Per Billion: equivalent of one second in 32 years	TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
NA	Not Applicable	MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
RUL	Recommended Upper Limit	MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
ND	Not Detected	MRDL	Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
RAA	Running Annual Average	MRDLG	Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
	Primary Standards: Federal drinking water regulations for substances that are health-related. Water suppliers must meet all primary drinking water standards.		
	Secondary Standards: Federal drinking water measurements for substances that do not have an impact on health. These reflect aesthetic qualities such as taste, odor and appearance. Secondary standards are recommendations, not mandates.		

Source Water Assessments

The New Jersey Department of Environmental Protection (NJDEP) in 2005 completed and issued the Source Water Assessment Report and Summary for our public water system. It is available at <http://www.nj.gov/dep/watersup-ply/swap/index.html> or, by contacting the NJDEP, Bureau of Safe Drinking Water at (609) 292-5550 or watersupply@dep.nj.gov. The list to the right provides the number of wells that have either a high (H), medium (M), or low (L) susceptibility rating for each of eight contaminant categories. The susceptibility ratings (in parentheses) for the four wells follow each contaminant category.

If a water system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. As a result of the assessments, the DEP may change existing monitoring schedules based upon susceptibility ratings.

- Nutrients (4 Wells-H): Compounds, minerals and elements (both naturally occurring and man-made) that aid plant growth. Examples include nitrogen and phosphorus.
- Pesticides (4 Wells-L): Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlorodane.
- Radionuclides (2 Wells-H, 2 Wells-M): Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.
- Volatile Organic Compounds (4 Wells-H): Man-made chemicals used as solvents, degreasers, and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.
- Pathogens (4 Wells-M): Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.
- Disinfection Byproduct Precursors (3 Wells-H, 1 Well-M): A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when the disinfectants used to kill pathogens (usually chlorine) react with dissolved organic material (leaves, etc.) in surface water.
- Radon (4 Wells-M): Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to <http://www.nj.gov/dep/rpp/radon/index.htm> or call 800-648-0394.
- Inorganics (1 Well-H, 3 Wells-M): Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead, and nitrate.